

REMARKS

As an initial matter, Applicant appreciates the thorough examination by the Examiner. Further, Applicant appreciates the Examiner affording his time to further explain comments in the Office Action during a telephone conversation on March 16, 2006.

The Examiner's Withdrawal of Claim 34

The Examiner alleges that newly submitted claim 34 is directed to an invention that is independent or distinct from the invention originally claimed. The Examiner argues that the species of a dispensing system mounted upon an independent platform is independent and distinct from the originally claimed species of the secured mounted or secured platform. The Examiner explains that claim 34 would have been restricted if originally presented. Further, the Examiner alleges that the species of an "independent platform" was not originally presented in the claims examined upon the merits.

Accordingly, the Examiner has withdrawn claim 34 from consideration as being directed to a non-elected invention under 37 CFR 1.142(b) and MPEP § 821.03. In an effort to further examination, Applicant has withdrawn claim 34 from the present application, without prejudice—thereby reserving its right to file a continuation application at a later date.

The Examiner's Interpretation of Claims 1 and 9

The Examiner alleges that the use of the alternative phrase "one or more" as a modifier of "motors" and "drive assemblies" in independent claim one is imprecise and does not positively recite that a motor may drive another drive assembly other than its own respective drive assembly.

Applicant submits that amended independent claim 1 as set forth below clearly recites that a motor may engage the drive assembly to which the motor is connected, and further engage any other drive assembly connected to the motor.

The Examiner's Rejections

The Examiner rejects claims 1-2, 4-7, 9, 12, 15-25, and 28 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5980836 to Moffett.

The Examiner also rejects claims 3 and 11 under 35 U.S.C. §103(a) as being unpatentable over Moffett.

The Examiner further rejects claim 10 under 35 U.S.C. §103(a) as being unpatentable over Moffett in view of U.S. Patent No. 3,124,270 to Cornell.

Still further, the Examiner rejects claims 13, 14, 26, 27, and 29-33 under 35 U.S.C. §103(a) as being unpatentable over Moffett in view of—either alone or in combination with—U.S. Patent No. 3,957,203 to Bullard and U.S. Patent No. 3,074,649 to Atkinson.

In response to the Examiner's above-referenced rejections, Applicant submits amended claims and addresses the Examiner's concerns herein below.

The Amended Claims Are Not Anticipated by Moffett

The Examiner has rejected claims 1-2, 4-7, 9, 12, 15-25, and 28 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5980836 to Moffett. The Examiner alleges that Moffett discloses a liquid mixing device capable of mixing any desired liquid placed in solution tanks 10, 12, 14, 16; pump assemblies 68, 36, 44, 24, 102, 84; a manifold 20, 52, 76, 78, 20, 20A, 78, 78A, 76, 76A, 78, and 106; and a drain assembly. The Examiner further alleges that Moffett discloses conduits and couplings to attach the conduits to the tanks, pumps, valves, and drains. Still further, the Examiner argues that the tank 16 may be heated.

Applicant respectfully disagrees with the Examiner's assessment of the pump assemblies, namely the motors and drive assemblies, as disclosed by Moffett for the reasons set forth below.

Moffett

Moffett discloses an apparatus for preparing low concentration polysilicate microgels that includes a number of reservoirs 10, 12, 14; a number of pump assemblies 68, 36, 44, 24, 102, 84; and a number of manifolds 20, 52, 76, 78 (see Figure 1), 20, 20A, 78, 78A, 76, 76A (see Figure 2), 78, 106, 20 (see Figure 3). As disclosed, the pumps of Moffett—and the respective drive assemblies of each pump—are spaced apart from one another. Further, the drive assemblies of each pump are not connected to one another. Accordingly, Applicant submits that a motor of one of the Moffet pumps is incapable of driving the drive assembly to which it is connected (i.e., "connected drive assembly") and the drive assemblies of the other pumps (i.e., "any other connected drive assembly"). Stated differently, the drive assemblies of each pump in Moffett are incapable of being driven by a single motor. In other words, none of the pumps disclosed by Moffett include a motor that is capable of engaging its own respective drive assembly the drive assemblies of other pumps. Accordingly, the pumps of Moffet are incapable of operating in conjunction with one another.

In contrast, the present invention provides a plurality of pumps 22, 23, 24—each having a drive assembly 26—in communication with a plurality of tanks 15, 16, 17, 18, and at least one motor 25 connected to at least one drive assembly, wherein the motor engages the drive assembly of one pump to drive the drive assembly to which the motor is connected as well as the drive assemblies of any other connected pumps (see Figs. 1-3, and 5). Specifically, the couplings 27 connect the drive assemblies of each pump to permit such engagement (see Figs. 1, 3, and 5).

Accordingly, Moffett does not teach or suggest a pump assembly having a motor that is capable of driving more than one drive assembly. To the contrary, Moffett teaches away from a pump assembly capable of operating in conjunction with drive assemblies of other pumps by remotely positioning pumps (and respective drive assemblies) apart from one another. By doing so, Moffett limits the pumps to independent operation, in contrast to the present invention, which facilitates the operation of pumps in a cooperative mode. Thus, Moffett does not disclose all of the elements described in independent claims 1 and 15 and therefore must be removed as a §102(b) reference.

The Claims are not Obvious in View of Prior Art

The Examiner rejects claims 3, 10, 11, 13, 14, 26, 27, and 29-33 under 35 U.S.C. §103(a) as being unpatentable over Moffett in view of—either alone or in combination with—U.S. Patent No. 3,957,203 to Bullard, U.S. Patent No. 3,074,649 to Atkinson, and U.S. Patent No. 3,124,270 to Cornell.

Moffett

With respect to claims 3 and 11, the Examiner alleges that Moffet discloses all of the recited subject matter except for couplings capable of receiving a hose and the pump being a diaphragm pump. Applicant submits that Moffet fails to disclose pumps having drive assemblies, and a motor connected to at least one drive assembly, wherein the motor engages the respective drive assembly (i.e., “connected drive assembly”) and drive assemblies of the other pumps (i.e., “any other connected drive assemblies”).

As set forth above, Moffett teaches pump assemblies that are spaced apart from one another and arranged adjacent to the respective reservoirs. As configured, the pumps—and respective drive assemblies associated with each pump—operate independently. Being restricted to independent operation, Moffet fails to teach (1) a plurality of pumps each having a drive assembly, and (2) a motor, wherein the motor is

connected to at least one drive assembly such that the motor engages the connected drive assembly and drives any other drive assembly to which the motor is connected (i.e., drive assemblies that are capable of operating in conjunction with one another) (see Figs. 1-3, and 5).

The present invention provides a plurality of tanks, a pump assembly having one or more pumps (each having a drive assembly), and a motor connected to at least one drive assembly such that the motor engages the connected drive assembly and any other connected drive assemblies.

Accordingly, Moffett fails to disclose an apparatus having pumps that are aligned such that a motor of one pump drives the drive assemblies of other pumps and therefore must be removed as a §103(a) reference.

Moffet and Cornell

With respect to claim 10, the Examiner argues that Moffet discloses all of the recited subject matter with the exception of one motor which is connected to one of the drive assemblies such that the motor engages one drive assembly to drive each of the drive assemblies. The Examiner alleges that Cornell teaches a pump control system that may utilize a single motor 15 connected to drive assemblies 28, 29, 30 which drive respective pumps 1, 2, 3, so as to provide convenient and precise proportional pumping of plural liquid ingredients. More accurately, Cornell discloses a pump control system having a motor 15 connected to a series of pulleys 17, 20, 23, 24, 28, 29, 30 by a series of belts 16, 21, 22, 25, 26, 27. As configured, the pulleys, or drive assemblies, of Cornell rotate about non-aligned axes. Stated differently, the axes of the drive assemblies of Cornell are non-coaxial.

In contrast, amended dependent claim 10 now recites that the drive assemblies of the present application are coaxially aligned such that each drive assembly is capable of coaxial rotation with respect to the other drive assemblies. Accordingly, Moffet taken

either individually or in combination with Cornell, does not teach or suggest a single motor connected to drive assemblies, wherein the drive assemblies are capable of coaxial rotation with respect to one another.

Moffett, Bullard, and Atkinson

With respect to claims 13-14, 26-27, and 29-33, the Examiner argues that Moffett discloses all of the recited subject matter as defined within the scope of the claims with the exception of the system being mounted on a vehicle or mobile platform. According to the Examiner, Bullard allegedly teaches that a mixed fluid material supplied in a tank may be provided upon a mobile platform 12. Atkinson supposedly teaches that a fluid delivery system from a tank 9, boom 3, and nozzle 1 may be operated from a cab 53. In sum, the Examiner argues that it would have been obvious to one of ordinary skill in the art to provide the mixing device of Moffett with a mount upon a vehicle or mobile platform with a cab, boom, or basket and nozzle for the mixer tank device of Moffett so that the mixed fluid may be easily transported and delivered to a particular location. Applicant respectfully disagrees with the Examiner's assessment of the pump assembly as disclosed by Moffett, and the alleged mobile platform as disclosed by Bullard.

The Examiner alleges that Bullard discloses a mobile platform 12. Applicant submits that the platform of Bullard is a truck bed forming an integral part of the vehicle frame (see Bullard, column 2, lines 32-33). In contrast, the present invention includes a wheeled platform 54 secured to, and not integral with, the vehicle frame. As constructed, Bullard fails to teach the use of a platform secured to a vehicle (see Figures 7 and 8).

Applicant submits there is no motivation to combine Bullard with Moffett to arrive at the present structure because Bullard teaches the use of a tank and boom assembly integral with (i.e., an essential part of) a vehicle frame. The combination of Moffett and Bullard results in a vehicle having pumps, tanks, a boom, and a spray nozzle mounted to the boom, wherein each of the above-referenced components are secured

directly to and integral with the frame of the vehicle. This combination does not result in a wheeled platform supporting the components, wherein the platform is not an integral part of the vehicle frame such that the platform may be removed from one vehicle, transported, and affixed to another vehicle.

Accordingly, Moffett, taken either individually or in combination with Bullard, does not teach or suggest a mixing assembly (i.e., pump and manifold) secured to a wheeled platform. Given that the combination of Bullard and Moffett fail to show or suggest these recitations, the addition of Atkinson to the combination of references is also insufficient to deny patentability.

For the reasons stated above, Moffett fails to stand as proper prior art, and taken either individually or in combination with Bullard and Atkinson, does not teach or suggest a mobile decontamination module comprising (1) tanks, a first pump having a drive assembly, a second pump having a drive assembly, a coupling connecting the drive assemblies of the first and second pumps, and a motor connected to the drive assembly of the first pump, such that the motor engages the drive assemblies of the first and second pumps or (2) a wheeled platform that supports tanks, pumps, drive assemblies, and a manifold, wherein the platform is a separate and distinct component apart from the vehicle (i.e., not integral with the vehicle).

In view of the structural distinctions between the present invention and the cited references, Applicant submits that combining Moffett—either alone or in combination with—Bullard and Atkinson in a way that renders the present invention obvious relies on impermissible hindsight.

Amended Independent Claims 1 and 15 are Patentable

Claim 1

Applicant has amended independent claim 1 to include a motor connected to at least one drive assembly such that the motor engages the drive assembly to which it is

connected (i.e., the connected drive assembly) and any other connected drive assembly. Stated differently, the motor of one pump can operate its respective drive assembly and the drive assemblies of the remaining pumps.

In contrast, Moffet—alone or in combination with—Bullard and Atkinson fails to describe, teach, or suggest an apparatus for mixing liquid decontaminants and dispensing a foam-based or liquid-based decontaminant that includes a plurality of tanks and pumps having drive assemblies, wherein a motor connected to one drive assembly is capable of engaging the other drive assemblies of the adjacent pumps.

Claim 15

As requested, Applicant has amended independent claim 15 to incorporate the remaining text previously appearing in claim 22, namely the wherein clause reciting that the first and second pumps are capable of drawing liquids from the plurality of tanks in defined ratios through the first and second pumps to the manifold for mixing and dispensing. Accordingly, amended independent claim 15 now defines a mobile decontamination module that includes a plurality of tanks, a first pump in communication with the tanks, a first drive assembly of the first pump, a second pump in communication with the tanks, a second drive assembly of the second pump, and a first coupling connecting the first and second drive assemblies, wherein a motor connected to the drive assembly of the first pump engages the drive assembly of the first pump and drives the drive assemblies of the first pump and the second pump.

Moffet—alone or in combination with Bullard and Atkinson—fails to describe, teach, or suggest a mobile decontamination module that includes a first pump having a first drive assembly, a second pump having a second drive assembly, and a first coupling that connects the first and second drive assemblies, wherein a motor connected to the first drive assembly engages and drives both the first and second drive assemblies of the first and second pumps.

Accordingly, Applicant submits that amended independent claims 1 and 15 include patentable subject matter and are now allowable.

Amended Dependent Claims now Conform to the Amended Independent Claims

Applicant has amended the appropriate dependent claims to conform to the amended independent claims and to more clearly define the present invention.

Specifically, Applicant has amended dependent claim 9 to recite that each pump is connected to a respective, independently operated motor.

Applicant has also amended the fifth line of dependent claim 10 to delete the term "one" modifying the term motor and substituted the term "said" therefore. Further, Applicant has amended the sixth line of dependent claim 10 to delete the terms "each of" modifying the term drive assemblies and substituted the terms "any other connected" therefore. Still further, Applicant has amended dependent claim 10 to recite that the drive assemblies are coaxially aligned such that each drive assembly is capable of coaxial rotation with respect to the other drive assemblies.

Moreover, Applicant has cancelled claim 22 and fully incorporated the subject matter into independent claim 15 as requested by the Examiner.

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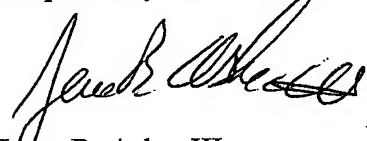
In re: Smith
Serial No.: 10/656,462
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Confirmation No.: 8430
Filed: September 5, 2003

CONCLUSION

Based on foregoing amendments and arguments, Applicant submits that pending Claims 1-7, 9-21, and 25-33 are now in immediate condition for allowance, and the same is respectfully requested. Presently, there are 29 pending claims in this application; thus, Applicant believes that there are no fees due associated with this amendment. Nevertheless, the Commissioner is authorized to charge any additional fee, or credit any refund, to our Deposit Account No. 50-0332.

Respectfully submitted,



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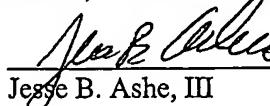
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Jesse B. Ashe, III